

FIRST INTERNATIONAL SEMINAR ON HIGH RESOLUTION
INFRARED SPECTROSCOPY

Praha, June 23.-26., 1970

First International Seminar on High Resolution Infrared
Spectroscopy in Praha, June 23.-26., 1970,

Organized by the Department of Molecular Spectroscopy of
the Institute of Physical Chemistry in Prague under the
Sponsorship of the Czechoslovak Spectroscopical Society

Program of Sessions

June 23, 1970

Morning Session

- Prof. G.Amet (Laboratoire de spectroscopie moléculaire,
Faculté des Sciences de Paris): "High Resolution
Rotation-Vibration Spectra of Symmetric and Spher-
ical Tops" (Invited paper)
- Dr. Z.Cihla and Dr. A.Chedin (Czechoslovak Academy of
Sciences, Prague, and Faculté des Sciences de Paris):
"Determination of anharmonic potential constants
in CO_2 "
- Prof. Ch.Courtoy (Département de physique, Faculté Univer-
sitaires N.-D. de la Paix): "High resolution infrared
spectrum of CS_2 "

Afternoon Session

- Dr. L.O'Henry (Faculté des Sciences de Paris): "High resolu-
tion measurements in the infrared"
- Dr. M.Winnewisser (Institut für physikalische Chemie der
Universität Kiel): "Vibration-rotation interaction
constants from the millimeter and submillimeter wave
spectra of HCNO "

Prof. K.D.Möller (Department of Physics, Fairleigh University, New Jersey): "On high resolution spectroscopy in the far infrared"

Dr. K.Serka (Institute of Inorganic Chemistry of the Slovak Academy of Sciences, Bratislava): "Least squares analysis of the Coriolis interactions in high resolution infrared spectra of symmetric tops"

June 24, 1970

Morning Session

Dr. R.Sovička (Institute of Physical Chemistry of the Czechoslovak Academy of Sciences, Prague): "Optical and mechanical design and the operational characteristics of the high resolution infrared spectrometer of the Institute of Physical Chemistry in Prague" (Invited paper)

Dr. J.L.Duncan (Department of Chemistry, University of Aberdeen, Scotland): "The analysis of Coriolis and Fermi resonance perturbations in infrared spectra by computer simulation of band contours" (Invited paper)

Dr. L.Nemes (Central Chemical Research, Institute of the Hungarian Academy of Sciences, Budapest): "Rotational structure simulations for Coriolis interacting bands of some planar asymmetric rotors" (Invited paper)

Dr. B.P.Winnewisser (Institut für physikalische Chemie der Universität Kiel): "The application of spectrum simulation to the ν_5 band of HSSH"

Afternoon

Excursion to the Infrared Laboratory of the Institute of Physical Chemistry in Prague.

June 25, 1970

Morning Session

Dr. I.T.Hougen (National Bureau of Standards, Washington): "Theoretical studies on the transfer of rotation angular momentum during a bimolecular collision" (Invited paper)

Dr. D.Papoušek (Institute of Physical Chemistry of the Czechoslovak Academy of Sciences, Prague): "Multiple-valued representation of symmetry groups in the classification of rovibronic levels of nonrigid and linear molecules"

Dr. L.Straka (Department of Physical Chemistry, Technical University, Budapest): "A connection between the inversion and internal rotation of methylamine"

Dr. J.Mink (Institute of Isotopes of the Hungarian Academy of Sciences, Budapest): "Internal rotation in organomercury compounds and the determination of potential constants"

Afternoon Session

Dr. E.Paál (Department of Physical Chemistry, Technical University, Budapest): "Approximate calculation of infrared band contours of planar symmetric top molecules"

Dr. A.Rueff (Abteilung für anorganische Chemie der Universität Ulm): "Untersuchung der Rotations-Schwingungsbanden der Moleküle HCF_3 und DCF_3 mit Hilfe eines Computerprogramms"

Dr. K.Serka, I.Boháček, and Dr. D.Papoušek (Institute of Physical Chemistry, Czechoslovak Academy of Sciences,

Prague): "Vibrational-rotational problem in quasilinear molecules with two bending modes"

Dr. F. Winter (Institut für physikalische Chemie der Universität Kiel): "The determination of anharmonicity constants in some 1,1-disubstituted ethylenes"

Doz. Dr. A. Müller (Anorganisch-chemisches Institut der Universität Göttingen): "Absolute IR-Intensitäten der $\nu(\text{PO})$ -Schwingungen von Phosphorylverbindungen"

June 26, 1970

Morning Session

Prof. H. Sewodny (Abteilung für anorganische Chemie der Universität Ulm): "Comparison of approximate methods in force-constants calculations"

Dr. V. Špirko (Institute of Physical Chemistry, Czechoslovak Academy of Sciences, Prague): "Solution of the inverse secular problem by the 'Monte Carlo' method"

Dr. B. Jordanov (Institute of Organic Chemistry, Bulgarian Academy of Sciences, Sofia): "Physical solution of the inverse vibrational problem"

Dr. B. Nicolova (Institute of Organic Chemistry, Bulgarian Academy of Sciences, Sofia): "On the relation between the symmetrized force constants"

Prof. Dr. E. Steger (Sektion Chemie, Technische Universität Dresden): "Kraftkonstantenberechnung nach Kopplungsstufen-Verfahren"

Afternoon Session

Dr. G. Strey (Sektion Physik der Universität München): "Isotopenregeln für die Schwingungsfrequenzen isotoper Moleküle"

Dr. F. Billea (Department of Physical Chemistry, Technical University, Budapest): "Redundancy conditions in symmetry coordinates representation in the theory of normal coordinate analysis"

Dr. A. Fedini (Laboratorium für anorganische Chemie der Universität Stuttgart): "Ein exaktes Bereichsmodell des allgemeinen Valenzkraftfeldes"

Dr. A. Alix (Laboratoire de recherches optiques, Faculté des Sciences, Reims): "Détermination de la fonction potentielle moléculaire et des distributions énergétiques des vibrations des molécules polyatomiques"